

Amendments to the Specification

Page 6, lines 30-34

Figure 6 is a plot of simulated S21 parameters for a second embodiment of the filter;
and

Figure 7 is a plot of simulated S21 parameters for a third embodiment of the filter;
and

Figure 8 is a schematic circuit diagram of arrays of resonators in accordance with the invention.

Page 9, Paragraph 1, Lines 1-13

Figure 4 shows a mobile telephone handset 400 which incorporates a duplexer which is similar in operation to the duplexer 22 of Figure 3. The purpose of the duplexer is to allow simultaneous transmission and reception in different frequency bands using the same antenna whilst ensuring that relatively high power transmit signals do not swamp the received signals which are to be amplified by the low noise amplifier. As noted above, SAW filters conventionally cannot be used for mobile handset applications in the 1800 MHz or above bands because the combination of high power and relatively high frequency rapidly destroys the filter electrodes. Thus in practice, such duplexers are presently built from ceramic filters. However, since the resonant modes of the filter of the present invention are in the receive band (when used in the transmit circuit segment) the high powers do not damage the filter. Thus, both in the base station of Figure 3 and the mobile handset of Figure 4, it is possible to use a SAW filter in the transmit circuit.

Page 9, Paragraph 4, Lines 29-36, and continuing onto page 10

With reference to Figure 8, the power handling capability of this filter may be increased using arrays of SAW filters resonators 40 and 42. Each array consists of a plurality of series and parallel resonators filters (in the example shown a square

array is used comprising nine filters arranged in a 3 x 3 grid). Assuming that parasitic capacitances are adequately controlled, and assuming that each of the resonators~~filters~~ in each array is identical, the frequency characteristic of the configuration of Figure 8 is identical to that of a single series and shunt resonator. However, since the voltages and currents across and through each resonator are divided by virtue of the series and parallel configurations respectively, the overall power handling capability is greatly increased. Thus, for example, using a 3 x 3 array of resonators as shown, the power handling capability is increased by a factor of 9. This may allow the band reject filter to be used at the power amplifier output of a low power (e.g. 5 watt) micro base station, for example. This configuration may be replicated with more than two arrays.